***Get to 1,000***

**Materials needed**: one die for each pair of students

**Directions:**

1. Players, in pairs, take turns rolling a die. On each roll, each player decides separately whether he or she want to multiply the number on the die by 1, 10, or 100.
2. Each player records the resulting product on a piece of paper.
3. Players continue to roll, multiply, and record their products until they have ten products n their papers. (Each player will have rolled the die five times.)
4. Each player finds the sum of his or her products. The one whose final score is closer to 1,000, whether over or under, is the winner.

**Extensions**

* Version A: roll the die ten times and multiply the number by 1, 5, or 50.
* Version B: roll the die ten times and multiply the number on the die by 10, 25, or 50.
* Version C: roll the die seven times and multiply the number by 1, 10, or 100.

***Simplified Krypto***

**Materials needed:** Krypto deck (56 cards, three each of numbers 1-6, 4 each of numbers 7-10, and two each of the numbers 11 – 17).

**Directions:**

1. Deal each player 5 cards.
2. Then select an additional card which is the “target.”
3. Your task is to find a way to combine 2 or more cards (each card can only be used once) and the operations (+, -, X, ÷) to yield the target number.

Make the game easier by using only cards numbered 1 through 5 or 10 and just +.

Make the game harder by making each player use all 5 cards.

***Adding Up the Deck***

**Materials needed:** standard deck of cards with jokers removed, number line and pencil

**Directions:**

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| 1. The game is played in teams of 2 -4 players. Once students develop some fluency, the teams may compete against each other to see who can finish the deck correctly. 2. Aces have a value of 1, and all other face cards have a value of 10. Remove the jokers. 3. The dealer deals out all the cards to the members of the team. 4. The first player begins by putting down a card and |  |

saying its value. The next player puts down a card and adds it value to the total so far. For example, the first player might put down an 8 and say, “Eight.” Then the next player might put down a 4 an say, “Twelve.’ The third player might put down a 5 and say, “Seventeen.” Students may keep track of the total with hops on a number line, as shown below.

1. Play continues until all cards are used, or for a predetermined number of rounds..



For beginning students, you may want to use just the cards 1-5.

***Take Five, Make Ten***

**Materials needed:** standard deck of cards (Ace through 9) with 10s, jokers, and face cars removed, OR numeral cards 1-9, one deck per pair, paper and pencil

**Directions:**

1. Shuffle the deck of cards and draw five cards.
2. Using the numbers on the cards, build five equations, each totaling 10. Follow the game rules.

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| GAME RULES   * +, -, X, and ÷ operations can be used. * A minimum of two and a maximum of five of the numbers can be used. * Numbers cannot be repeated in the same equation unless there are two of the same number cards. |

1. Record the five equations on paper.
2. The end of the game is determined when all cards have been played (typically six rounds).
3. The winner is the person with the most points (1 point per equation that equals 10).

***Leftovers with 15***

**Materials needed:** color tiles, 15 tiles per pair of students, small paper plates or squares of construction paper – 6 per pair of students, cup – 1 per pair of students, 1 die per pair, paper and pencil

**Directions:**

1. Decide who is Player 1 and who is Player 2.
2. Player 1 rolls the die and lays out that number of plates/construction paper rectangles.
3. Player 1 than takes the cup of tiles and divides the tiles equally onto the plates, keeping any leftovers aside.
4. Player 1 says and records the math equation that describes the plates and tiles. For example, “fifteen divided into two groups is seven in each group, with a remainder of one.” Player 1 records: 15 ÷ 2 = 7 R 1.
5. Player 1 initials the equation and returns *only* the tles that are on the plates to the cup for the next player’s turn.
6. Player 2 repeats Steps 2-5. For example, Player 2 might roll 4, thus distributing the fourteen tiles among four plates and saying, “Fourteen divided into four groups is three with a remainder of two. Player 2 records: 14 ÷ 4 = 3 R 2., and returns the 12 tiles on the plates to the cup.
7. Player 1 now continues with the 12 tiles. Play alternates until all the tiles are gone.
8. Each player counts the number of tiles collected as remainders. The winner is the player with the most remainders –referred to as *leftovers!*

***Product Game***

**Materials needed:** Game board (game board for factors 0 through 6 or factors 1 through 9), clip and two different colors of chips (two different kinds of markers)

**Directions:**

1. Player 1 places a clip on the game board.
2. Player 2 places a second paper clip on another factor and claims the product of those two factors by placing a colored chip on that square on the game board.
3. Player 1 then moves one of the clips to a different factor and claims the resulting product.
4. Players continue taking turns by moving one paper clip and claiming the resulting product until one player wins – that is, claims four squares – or a draw is declared.